

Appl. No. 10/711,567
Amdt. dated July 21, 2006
Reply to Office action of June 23, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

- 1 (original): A method for manufacturing a ternary nitride-based buffer layer of a
5 nitride-based light-emitting device, comprising the steps of:
providing a substrate;
introducing a first reaction source comprising a first group III element into a
chamber at a first temperature, the melting point of the first group III
element being lower than the first temperature, wherein the first group III
10 element is deposited on the substrate; and
introducing a second reaction source comprising a second group III element
and a third reaction source comprising a nitrogen element into the chamber
at a second temperature for forming a ternary nitride-based buffer layer with
the first group III element on the substrate, wherein the second temperature
15 is not lower than the melting point of the first group III element.
- 2 (original): The method of claim 1, wherein the substrate comprises at least a material
selected from the group consisting of sapphire, GaN, AlN, SiC, GaAs, GaP, Si, ZnO,
MgO, MgAl₂O₄, glass, and the like.
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- 3 (original): The method of claim 1, wherein the first temperature is 500°C or above.
- 4 (original): The method of claim 1, wherein the second temperature is 700°C or above.
- 25 5 (original): The method of claim 1, wherein the first group III element comprises at
least a material selected from the group consisting of Al, Ga, In, and the like.

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6 (original): The method of claim 1, wherein the second group III element comprises at least a material selected from the group consisting of Al, Ga, In, and the like.

7 (original): The method of claim 1, wherein the ternary nitride-based buffer layer
5 thickness is between 1nm and 500nm.

8 (original): The method of claim 1, wherein the ternary nitride-based buffer layer
comprises at least a material selected from the group consisting of InGa₂N, AlGa₂N,
InAlN, and the like.
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9-19 (cancelled).